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Central Vermont Public Service Corporation

SEP 11 10 36 AM '95

September 8, 1995

Mr. Richard Spiese
Sites Management Section
103 South Main St./West Office Building
Waterbury, VT 05671-0404

RE: CVPS Ascutney Service Center, (Site # 870051)

Dear Mr. Spiese:

The attached report from Stone Environmental Inc. summarizes their site activities and suggests a revised approach for future monitoring. Your timely participation, through your letter and at our meeting, allowed SEI to integrate technical and regulatory considerations into the report. CVPS believes this document provides a fine update on site conditions in view of regulatory, technical and business changes that have occurred since the release. CVPS plans to eventually sell the property and this effort also helps define the existing site conditions.

SEI recommends adjustments in the monitoring program, closure of certain wells and possible soil removal. The proposed soil removal is conditional upon field measurements during a planned sewage disposal project near the still affected soil. SEI will evaluate the soil conditions during the project, decide if soil removal is appropriate and coordinate their efforts with you. The Wastewater Management Division recently approved the sewer project and it will begin either late next week or the week of September 18.

Please review the report at your convenience and provide us with your comments on SEI's recommendations. If there is any additional information that I can provide, please call me at 747-5707.

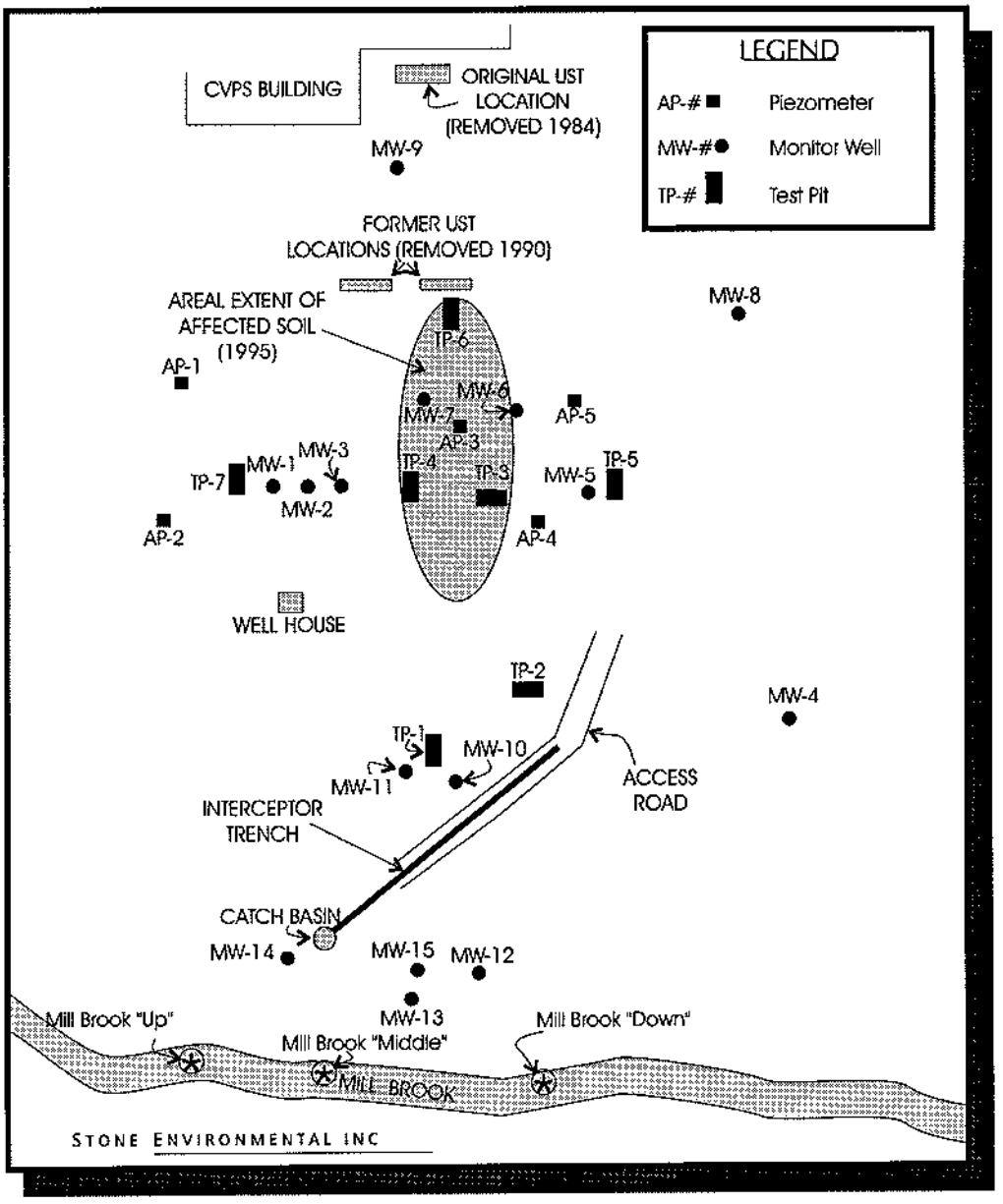
Sincerely,

John Greenan

John C. Greenan, P.E.
Environmental Engineer

77 Grove Street.
Rutland, Vermont 05701
802-773-2711

SITE CHARACTERIZATION REPORT FOR CVPS - ASCUTNEY SERVICE CENTER



PREPARED FOR:

John Greenan, P.E.
CVPS
77 Grove Street
Rutland, Vermont 05701

PREPARED BY:

STONE ENVIRONMENTAL INC

58 East State Street
Montpelier, Vermont
05602

Phone/ 802.229.4541
Fax/ 802.229.5417

September 8, 1995

1.0 INTRODUCTION

In March 1995 the Central Vermont Public Service Corporation (CVPS) retained Stone Environmental, Inc. (SEI) to provide consulting and environmental services in support of their water quality monitoring program at the CVPS Ascutney Service Center site on Route 131 in Weathersfield, Vermont (see Figure 1). The Ascutney Service Center site has been subject to ongoing water quality monitoring since 1986 following the discovery of a petroleum release from underground gasoline storage tanks (UST) located on the premises. At the direction of CVPS, SEI completed the annual water quality sampling on April 27, 1995 at the Ascutney Service Center site as required by the Vermont Department of Environmental Conservation (VTDEC). In June 1995 SEI also performed a site investigation involving the excavation of test pits, groundwater and surface water sampling, and a vapor pump test for the purpose of re-assessing environmental conditions at the site and to evaluate the need for additional work. This report serves to update both CVPS and the VTDEC on current site conditions at the Ascutney Service Center, and offer qualified recommendations for site closure.

2.0 BACKGROUND INFORMATION AND OBSERVATIONS

In 1984 CVPS removed a 3,000 gallon UST on the south side of the Ascutney Service Center building (see Figure 2). This tank was replaced that same year by a new 5,000 gallon gasoline underground storage tank sited approximately 50 feet south of the original tank location. In February 1985 the fittings of this tank failed a tank tightness test. It was quickly repaired and passed another tightness test later that month. The VTDEC was then notified that the Service Center's water supply spring, located approximately 130 feet south-southwest of the new tank site, was contaminated with petroleum constituents. A bedrock well was installed as a replacement water supply just off the east end of the Service Center building up-gradient of both tank sites. In 1990 the VTDEC witnessed the removal of the 5,000 gallon tank and reported it to be in good condition, but there were contaminated soils detected within the excavation.

After the reported release in 1985 and at CVPS's direction, Aquatec, Inc. of South Burlington, VT conducted a series of site investigations to determine the degree and extent of the gasoline contamination. Aquatec completed numerous soil borings as well as the installation of 5 piezometer wells and 15 groundwater monitoring wells (see Figure 2). In addition to their periodic sampling of the groundwater monitoring well array, Aquatec established three surface water sampling sites in Mill Brook (up-stream, down-stream and opposite the tank site).

Initial monitoring of groundwater conditions at the site found there to be measurable thickness of free-phase gasoline product in monitoring well MW-7 (located 40 feet south of the new tank site) and petroleum sheens in several other down-gradient wells. The findings of subsequent monitoring events indicated the gasoline plume was migrating in a southerly direction from the tank site(s) toward the Mill Brook, a small west-flowing stream located approximately 310 feet south of the new tank site.

In November of 1986, Aquatec supervised the construction of a passive (gravity-driven) groundwater interception trench with an oil/water separator and aeration chamber placed across the long axis of the contaminant plume approximately 180 feet south of the new tank site (see Figure 2). The interception trench was installed to prevent free-phase product from reaching Mill Brook. Immediately

following construction of the interceptor trench benzene levels as high as 67 parts per billion (ppb) were detected at the Mill Brook sampling Center down-stream of the trench system dry wells (Center MB-2). However, shortly thereafter these levels began to decrease and within a year were below detectable levels (less than 1 ppb). No evidence of surface water contamination has been detected at any of the Mill Brook monitoring Centers since June of 1987.

Historically, monitoring wells MW-7, MW-10, MW-11, MW-12 and MW-13 have consistently yielded the highest levels of groundwater contamination and are believed to define the long axis of the contaminant plume and its direction of migration. As of the April 30, 1994 groundwater monitoring event, benzene and BTEX concentrations in these wells have decreased by almost 97%. The most notable reduction in contaminant levels is at well MW-7 where BTEX concentrations have declined from over 80,000 ppb to 134 ppb (47 ppb benzene).

Elevated levels of contaminants were also detected initially in monitoring wells MW-2, MW-3, MW-5, MW-6, and MW-14. However, subsequent monitoring events found that contaminant levels in these wells attenuated rapidly. By 1989, both benzene and total BTEX concentrations in these wells had decreased almost 100%. As of the April 10, 1989 monitoring event, benzene levels in these wells were less than 1 ppb and total BTEX levels were reported to be less than 4 ppb.

Despite the significant reduction in BTEX levels at the site since the installation of the interception trench system, benzene levels at monitoring well MW-7 and both benzene and xylene concentrations at monitoring well MW-10 remain above the VTDEC Enforcement Standards (Primary Ground Water Quality Standards, Chapter 12 Ground Water Protection Rule and Strategy, 1988). In consideration of the shallow depth to groundwater (between 3 and 6 feet) at the site and its proximity to the organic topsoil and root zone horizon, our initial assessment was that the slow attenuation of the remaining contaminants is a result of hydrocarbon partitioning in the smear zone (the portion of the soil profile between the seasonally high and low water table elevations). Notably, the slow contaminant attenuation rate or tailing effect is seen only at wells MW-7 and MW-10 where free phase gasoline product had previously been present. Based on the limited information available, the water table fluctuation at the Ascutney Service Center site appears to be on the order of 1.5 to 2.0 feet.

The rapid decline in contaminant levels in monitoring wells on the fringes of the gasoline plume, and relative speed of product migration within the plume, suggests the soils at the site have a high permeability to water. To our knowledge, no testing was previously undertaken on any of the existing monitoring wells to determine the efficacy of a vapor extraction system.

2.1 Work Plan for Additional Site Characterization

After evaluating the results of the April, 1995 water quality monitoring and review of the Ascutney Service Center site project history, SEI determined that additional site testing was needed to fully characterize current site conditions before recommending further activities. To this end, SEI developed a work plan consisting of the following activities:

- A test pit investigation of the soil profile within the contaminant plume with photoionization detector (PID) and laboratory screening for petroleum hydrocarbons to determine if significant contamination resides in the water table smear zone;

- a complete sampling of all groundwater monitoring wells, the Mill Brook surface water monitoring Centers, and the interceptor trench catch basin to confirm overall water quality conditions at the site;

- pre-sampling and post-sampling PID screening of the groundwater monitoring well and piezometer well bores to establish the soil vapor distribution at the site; and

- an air extraction pump test on groundwater monitoring wells at representative locations for the purpose of evaluating the site's suitability to a vapor extraction remediation system.

Upon CVPS's acceptance of the work plan, the additional site testing activities at the Ascutney Service Center commenced on June 13, 1995.

3.0 WATER QUALITY SAMPLING

SEI performed the water quality sampling at the Ascutney Service Center on June 13, 1995. Groundwater samples were collected from existing groundwater monitoring wells MW-1, 2, 3 , 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, the interceptor trench catch basin (MW-15), and the spring house (the former water supply). The results of the groundwater quality sampling are summarized in Table 1. Surface water samples were also collected from the three Mill Brook monitoring Centers designated MB-1, MB-2 and MB-3. These results are presented in Table 2. The individual laboratory report forms for both the groundwater and surface water sampling Centers are provided in Appendix 1.

All the water quality samples were collected in 40 ml VOA containers equipped with Teflon septa, preserved with HCL, and stored in a cooler on ice until delivery to the laboratory. All samples were analyzed in the laboratory for purgeable aromatics (BTEX and MTBE) via EPA Method 8020.

3.1 Sampling Methodology and Procedures

Prior to sampling the groundwater monitoring wells, a photoionization detector (PID) equipped with a 10.2 eV lamp was employed to screen the well bore for vapors. Then water level measurements and free-product checks were made with an interface probe, after which the wells were developed through the removal of three well volumes to insure that fresh groundwater was sampled. The wells were developed and sampled using disposable neoprene plastic bailers. The well development water was placed in a calibrated 5 gallon bucket and inspected for evidence of petroleum sheens. Upon completion of the well development procedure the record groundwater samples were collected and placed in the sample containers. Lastly, the well bores were again screened with the PID to check for contaminant off-gassing from the fresh groundwater.

3.2 Field Measurements and Observations

The results of pre-sampling and post-sampling PID vapor screening performed on the monitoring wells are summarized in Table 3. Vapor measurements were also taken from the five existing piezometer wells (AP-1, AP-2, AP-3, AP-4 and AP-5) and are included in Table 3.

Of the 19 wells tested, measurable PID vapor concentrations were only detected in wells MW-7 (2.1 ppm), MW-10 (4 ppm), MW-11 (0.6 ppm) and AP-3 (35 ppm). Of these wells, only well MW-10 showed an increase in vapor levels (from 4 ppm to 20 ppm) in the post-sampling PID screening. All the other wells, including wells MW-7 and MW-11, yielded no detectable vapors in the post-sampling screening.

Due to the exceptionally dry summer (below average rainfall for the season) water levels at the site are lower than normal. Depths to the water table at the site as measured on June 13, 1995 ranged from 6.2 feet at well MW-7 on the upper portion of the site (north end) to 2.9 feet at MW-10 in the middle of the site, to 4 feet at MW-12 at the lower portion of the site (south end). Groundwater flow is predominantly to the south towards Mill Brook at a gradient of 12%.

The interface probe product gauging yielded no detectable free-phase product in any of the monitoring wells at the site nor was there any detected in the interceptor trench catch basin and oil/water separator vessel. Additionally, no petroleum sheens were observed in the well development wastewater removed from the monitoring wells prior to sampling.

3.3 Groundwater Sampling Results

The groundwater quality sampling results are summarized in Table 1. Of the 15 Centers sampled, only wells MW-7, MW-8, MW-10 and MW-12 yielded detectable concentrations of BTEX compounds. Of the wells with detectable contamination, wells MW-7, MW-10 and MW-12 had benzene concentrations above the VTDEC Enforcement Standard limit of 5 ppb. Well MW-10 also yielded Xylene levels above the Enforcement Standard (400 ppb). Well MW-12 yielded a methyl-tert-butyl-ether (MTBE) concentration of 64 ppb. While there is not a specific Enforcement Standard for MTBE, the VTDEC uses the Vermont Health Advisory Limit value of 40 ppb for this constituent.

The preponderance of benzene in groundwater at wells MW-7 and MW-10 compared to the relatively low levels of toluene, ethylbenzene and xylene detected is noteworthy. Benzene is the more soluble compound of the BTEX group and, along with MTBE, is typically one of the first constituents detected down-gradient of a gasoline release site. However, the absence of BTEX (primarily benzene) in wells MW-1, MW-5 or MW-6 would seem to preclude the likelihood of a gasoline release more recent than the one reported in 1986.

3.4 Surface Water Sampling Results

The results of the Mill Brook surface water sampling are presented in Table 2. The June 13, 1995 sampling yielded no detectable concentrations of benzene, BTEX or MTBE at any of the three monitoring Centers. Additionally, during a reconnaissance of the stream bank (conducted opposite the catch basin to a the west property line) no visible manifestations of contamination (sheens, staining, cloudiness) were observed in the stream or in the river bank cut faces.

3.5 Water Quality Trends

Summary tables for benzene and BTEX concentrations detected in the groundwater monitoring wells during the spring sampling events at the Ascutney Service Center site from circa 1986 to the present

are provided in Table 4. Two sets of graphs illustrate the benzene and BTEX trends over time (Appendix 2). The first set of graphs depicts benzene and BTEX concentration trends in monitoring wells in wells MW-3, MW-5 and MW-6. These wells form an East-West traverse across the width of the contaminant plume (perpendicular to the long axis of the plume). These graphs illustrate the rapid decline in total BTEX levels between December 1986 and April 1989. The East-West Traverse graphs also show the significant decline in benzene levels from April 1988 to April 1989, however, benzene levels in well MW-5 did not drop below the Enforcement Standard limit until late 1990 - early 1991.

The second set of graphs (titled North-South Traverse) include benzene and BTEX data from wells MW-7, MW-10, MW-11, MW-12, MW-13, and the interceptor trench catch basin. These wells comprise a traverse down the long axis of the contaminant plume from north to south. The graphs also depict the rapid decline in benzene and BTEX concentrations between circa 1986 and 1989, however, the monitoring wells in the north-south traverse illustrate the tailing effect or slower attenuation of the contaminants in the center of the plume. The graphs also illustrate the sudden increase in benzene and BTEX concentrations in well MW-10 between April 1989 and May 1990. The timing of this increase in contaminant levels appears to coincide with the UST removal in 1990. Unfortunately, well MW-7 was not routinely sampled (possibly due to the presence of free product) so it is difficult to draw any firm conclusions on the basis of solely well MW-10 (unless we take into account the persistence of free product in MW-7).

4.0 SOIL SAMPLING

On June 14, 1995 SEI completed a series of test pit excavations at the Ascutney Service Center site utilizing a backhoe excavator and photoionization detector to screen the soil profile for petroleum vapors. In general, ~~the~~ we encountered loamy sands from the ground surface to approximately 2 feet above bedrock. A fine to silty sand layer comprised the interval between the loamy sand and bedrock. Composite soil samples were also collected and submitted to the laboratory for analysis via EPA Method 8260 and EPA Method 418.1 (total petroleum hydrocarbons assay). The laboratory assays together with the PID vapor screening results are summarized in Table 5. The individual laboratory report forms are provided in Appendix 1.

4.1 Sampling Rational and Methodology

The goals of the test pit operation were three-fold: (1) expose and sample soils from the smear zone at locations within the contaminant plume; (2) define the limits of soil contamination through excavation at the toe and flanks of the contaminant plume; and (3) gain first-hand knowledge of the soil profile (i.e., composition, depth to bedrock, thickness of the smear zone) to aid in the preparation of a corrective action plan if active remediation is deemed necessary.

The test pits were excavated using a backhoe with an extendible boom. As the excavation progressed, the PID was utilized to screen the soil for the presence of volatile organic compounds. In addition to ambient screening with the PID, soil samples were placed into self-sealing plastic bags to facilitate head-space screening of the soil samples. Upon reaching the water table a composite of soils collected from the smear zone were placed in 250 ml amber glass jars and submitted to the laboratory for analysis. The samples were kept on ice in a cooler until delivery to the laboratory.

4.2 Field Testing, Laboratory Results and Observations

The first test pit excavation, TP-1, was located toward to the southern end of the groundwater contamination plume between monitoring wells MW-10 and MW-11. Weathered bedrock ledge was encountered at this location at a depth of 3 feet below ground surface (bgs). Groundwater was observed just above the bedrock horizon which dipped steeply to the south. The silty fine sands overlying the bedrock at this location exuded a mild petroleum odor and yielded a PID reading (head-space) of 25 ppm. The laboratory assays of the composite soil sample from the smear zone (from 2 feet to 4 feet bgs) yielded no quantifiable benzene, BTEX or MTBE concentrations (the detection limit for benzene was 25 ppb) and a total petroleum hydrocarbon (TPH) concentration of 13.24 ppm. These results suggest that the contamination present in monitoring well MW-10 is principally dissolved-phase gasoline originating from a source more up-gradient of this local. The absence of BTEX and relatively low TPH values indicate that the smear zone at this location was mildly impacted by gasoline product.

The second test pit excavation, TP-2, was sited approximately 40 feet northeast of TP-1. As at TP-2, weathered bedrock ledge was encountered at 3 feet bgs, however no groundwater was observed. No petroleum odors were discerned in the soil profile and no PID-detectable vapor were present. In light of the absence of any apparent contamination no soils samples were submitted to the laboratory from TP-2. This test pit appears to define the eastern margin of the contaminant plume at this portion of the site. The absence of groundwater on the bedrock horizon is noteworthy in that it suggests that groundwater flow across the site controlled by depressions or scours in the underlying bedrock layer. This indicates that the extent (and quantity) of soil contamination at the site may be less than initially estimated.

Test pit TP-3 was located approximately 40 feet due south of monitoring well MW-6. Weathered bedrock was encountered at this location at 8 feet bgs. The silty fine sand soils at the bedrock horizon were wet. Strong gasoline odors were discernible at 6 feet bgs; the smear zone was determined to extend from 6 feet to 8 feet bgs. PID headspace screening of the smear zone composite soil sample yielded readings of up to 650 ppm. During excavation it was observed that stronger odors were exuded by the soils when crumbled. The confirmatory laboratory assays yielded a total BTEX concentration of only 1320 ppb (benzene concentrations were not quantifiable due to a high detection limit - 230 ppb). However, the EPA Method 418.1 assay reported a TPH value of 355 ppm. These results indicate that the gasoline has degraded substantially and also appears to confirm that the contaminants in their present condition have partitioned onto the soils.

Test pit TP-4 was sited approximately 40 feet due west of test pit TP-3 and 15 feet due east of monitoring well MW-3. The depth to bedrock at this location was measured at 10 feet bgs - approximately 2 feet deeper than was measured in TP-3 (both test pits are at about the same ground surface elevation). Groundwater was observed at a depth of 7 feet, although the smear zone appears to extend from 7 feet to 10 feet bgs. Gasoline odors were noted in the test pit, however the odors were not as strong as in TP-3 and of a decidedly more stale nature. PID headspace screening of the smear zone composite sample measure a vapor concentration of 400 ppm. Interestingly, the EPA 8260 assay found that BTEX levels (total BTEX 3520) were higher at this location than at TP-3 while the TPH values (165.4 ppm) were lower.

The fifth test pit excavation, TP-5, was sited approximately 6 feet due east of monitoring well MW-5. Bedrock was encountered at 8.5 feet bgs but the soil profile was wet at only 4 feet below ground surface. No petroleum odors were discernible at this location and the PID headspace screening of the

composite soil sample did not yield any detectable vapors. Laboratory analysis of the soil sample via EPA Method 418.1 yielded a TPH value of only 1.95 ppm. This test pit is considered to define the eastern limit of soil contamination at this portion of the site.

Test pit TP-6 was excavated approximately 20 feet southeast of the new gasoline UST installation and 30 feet northeast of monitoring well MW-7. Bedrock was encountered at 10 feet bgs although the soil profile was dry to within a couple of inches from the underlying bedrock layer. Moderate gasoline odors were first detected at 6 feet bgs and became stronger with depth. The smear zone at this location appears to extend from 6 feet to 10 feet bgs. Via the PID headspace screening a vapor concentration of 600 ppm was measured in the smear zone composite soil sample. The laboratory assays reported a TPH concentration of 442.17 ppm in the soil sample, however the total BTEX concentration was only 111 ppb with benzene at less than 10 ppb and an MTBE concentration of 45 ppb.

The last test pit site, TP-7, was located approximately 12 feet due west of monitoring well MW-1. Bedrock was encountered at 7 feet yet no groundwater was observed and the soils were dry at the bedrock interface. While at about the same ground surface elevation, the depth to bedrock at this location appears to be approximately 3 feet shallower than that measured in test pit TP-4 located approximately 50 feet to the east. No petroleum odors or PID-detectable vapors were noted at this location. The confirmatory laboratory assay yielded a TPH value of 2.83 ppm. This test pit appears to define the western limit of the contaminant plume at this portion of the site.

The absence of groundwater above the bedrock horizon appears to have a direct correlation to the absence of significant soil and vapor contamination in the two test pits where no groundwater was encountered (TP-2 and TP-7). As highlighted in the test pit analysis, comparison of depths to bedrock in test pits at approximately the same ground surface elevation indicate that there may be two narrow but separate bedrock depressions or scours which are controlling the migration of contaminants from the tank sites toward Mill Brook. Additional evidence supporting underground migration channels is the significant variation in groundwater contaminant levels between wells MW-10 and MW-11 and wells MW-12 and MW-13. There is also the possibility of a bowl-type feature in the bedrock existing somewhere between wells MW-7 and MW-10. Such a feature might account for the variations in dissolved BTEX concentrations during periods of seasonal water table fluctuation.

5.0 VAPOR EXTRACTION PILOT TESTING

On June 13-14, 1995 SEI conducted a series of air/vapor extraction pump tests on existing groundwater monitoring wells at the Ascutney Service Center site to determine if soil vapor extraction techniques could be utilized at the site. Due to the lack of any monitoring well construction details, we were unable to determine the amount of well screen exposed in each well. However, given the unusually low water table conditions this year, it is likely that all the wells had an exposed screen interval (not submerged in the water table) to allow a reasonable test. The vapor extraction pump testing PID vapor monitoring results are summarized in Table 6.

5.1 Vapor Extraction Test Methodology and Procedure

The pump test was completed using a specially outfitted vacuum blower and a bleed air valve on

the suction side of the blower to control suction pressures and air extraction rates. The suction line was fastened onto the well bore via a rubber Fernco adapter fitting. Suction pressures and vacuum response in surrounding wells were monitored with a triplet of magnehelic gauges (gauge ranges: 0 - 5 inches of water; 0 - 10 inches of water; and 0 - 50 inches of water). Vapor concentrations in the extracted air stream were measured in both bag samples and in-pipe readings using the photoionization detector. In-pipe temperature readings, measured with a thermocouple/superheat pyrometer instrument, were also taken as a means of determining if air was short-circuiting up around the outside of the well bore (by comparing the outside or ambient air temperature to the extracted air temperature). Lastly, the air extraction rates were determined using a pitot tube and magnehelic pressure/suction gauge assembly.

The vapor pump test was performed on monitoring wells MW-1, MW-3, MW-5, MW--6, MW-7, MW-10 and MW-11. During the pump test, suction pressures were also gauged on any nearby monitoring wells as a means of determining the vapor extraction system (VES) radius of influence. PID vapor levels, air temperature and extraction rates were measured at each well at four suction pressure regimes: Ambient pressure (no flow); low flow - 3 inches (of water) suction; medium flow - 8 inches suction; and high flow - 15 inches of suction.

5.2 Vapor Extraction Test Results

The results of the vapor extraction pump test were less than satisfactory in all test categories. At the low flow extraction rate, PID-detectable vapors were measured only at monitoring well MW-3 and only 0.4 ppm at that. No PID vapors were detected in any of the wells at the medium flow rates. PID readings of 1 ppm were detected in test wells MW-10 and MW-3 at the high flow rates. The VES radius of influence was also unsatisfactory, as 6.5 feet was the maximum radius of influence achieved and that was only at the high flow extraction rates (15 inches of water suction). In the case of MW-10, a maximum PID vapor level of 1 ppm was achieved yet only 15 feet away, test pit TP-4 yielded soils with PID vapor levels of 400 ppm.

Lastly, over half of the pump test wells evidenced short-circuit air flow to the surface at the high flow extraction rates. This is attributed to the shallow depth of the well screen in most of the wells, as well as the absence of grout or bentonite seal on several of the wells.

6.0 CONCLUSIONS

After careful review of the CVPS - Ascutney Service Center site project file and evaluation of the findings of the recently completed site characterization we offer the following conclusions:

1. Groundwater quality at the site has improved steadily since the installation of the groundwater interception trench system in 1986. Groundwater monitoring results for 1995 show that no free phase product is measurable in a any of the monitoring wells at the site and the benzene and BTEX concentrations in groundwater in the most severely impacted portions of the site (as defined by monitoring wells MW-7, MW-10, MW-11, MW-12 and MW-13) have declined by nearly 97%. Additionally, benzene and BTEX levels in monitoring wells peripheral to the contaminant plume have declined by almost 100%.

2. Since the initiation of surface water monitoring, no quantifiable concentrations of benzene or BTEX have been detected at any of the Mill Brook monitoring Centers.

3. PID screening and confirmatory laboratory analysis performed during the recent site characterization study shows a close spatial correlation between the location of the groundwater contaminant plume and the portion of the site where volatile and semi-volatile hydrocarbon residues were detected in the subsoil. The recent site characterization work also found that the bulk of the remaining petroleum contamination at the site is partitioned on subsoil within the contaminant smear zone (that portion of the soil profile located between the seasonal high and low water table levels). No evidence of contamination was observed in the surficial or near-surface portion of the soil profile within the known limits of the contaminant plume.

4. Laboratory analysis of soil composites sampled from the contaminant smear zone at various locations within the contaminant plume indicate that the residual contamination is principally comprised of semi-volatile hydrocarbons. Given that free phase gasoline product was at one time present throughout large portions of the site, the relatively low levels of volatile hydrocarbons (represented as BTEX) detected in the subsoil indicates that biological and chemical degradation processes have already significantly reduced petroleum hydrocarbon concentrations in the subsoil at the site.

5. Quantifying the reduction in soil contamination is hindered by a lack of any previous laboratory analytical data from which to draw a comparison. However, if we were to assume that at one time soils within the contaminant plume were saturated with free phase gasoline product (as evidenced by measurable thicknesses of free product in groundwater as indicated in the monitoring record), the maximum TPH concentration of only 442 ppm detected in the subsoil in the contaminant plume (as measured in the smear zone at test pit location TP-6) indicate that soil conditions have improved significantly. While we have no laboratory data to prove that there has been a 90% reduction in soil contamination, the TPH concentration of 442 ppm is well below the State action level of 1000 ppm and the maximum BTEX constituent concentrations detected in soils at the site are less than 20 times the groundwater enforcement standard limit for these compounds.

6. The relatively low concentrations of dissolved phase hydrocarbons detected in the plume monitoring wells despite the presence of residual hydrocarbon constituents in the soil profile suggests that the remaining contaminants have a low mobility an/or low solubility. The extremely low PID vapor levels measured in air extracted from monitoring wells within and at the perimeter of the contaminant plume during the recent soil vapor extraction/air pump testing program are seen as further evidence of the low mobility and small mass of the remaining contaminants at the site.

7. Although elevated PID vapor readings were recorded during the test pit investigation, the highest PID vapor readings were only detected when the soils were disturbed or agitated. The evidence suggests that the high PID readings are attributable to vapors contained within the soil pores rather than an off-gassing of vapors from residual hydrocarbon contaminants partitioned on the subsoil. This conclusion is further supported by the rapid decline in vapor levels over time observed during headspace screening of soil samples (in self-sealing sample bags) and the absence or extremely low vapor levels detected during PID screening of the plume monitoring wells during both the groundwater sampling event (pre-sampling and post-sampling PID screening) and the vapor pump

test phase of the site characterization.

8. Previous field testing and laboratory analysis of samples from the existing groundwater and surface water monitoring Centers indicates that at no time has contamination from the Ascutney Service Center site migrated beyond the property boundary or impacted Mill Brook, immediately down-gradient of the release site. In consideration of the site's hydrogeological characteristics and evaluation of the recently acquired data on soil and groundwater quality conditions, we submit that there is little chance of any detectable impact to Mill Brook or any neighboring properties in the future. With over 10 years of site monitoring data available on environmental conditions at the Ascutney Service Center site, we have a high level of confidence in this assessment. Additionally, CVPS has taken measures to reduce or eliminate the potential for future impact including the removal of all underground fuel storage facilities from the service center premises.

7.0 RECOMMENDATIONS

We believe that the present soil and water quality data together with the relevant hydrogeological and site history information submitted in this report demonstrates that the site conforms to the intent of the "Site Management Activities Completed" (SMAC) guidelines as they relate to the identification of the contaminant source(s), definition and delineation of the nature and extent of the contamination, remedial effectiveness, contaminant containment, and absence of impact to surface waters of the State, neighboring properties or sensitive receptors. However, in spite of the evidence showing that the overall reduction in contaminants is great, both soil and groundwater contamination still exceed the VTDEC guidelines in some locations, which would make immediate closure unlikely. Benzene concentrations in three of the fifteen groundwater monitoring wells at the site (wells MW-7, MW-10 and MW-12) have not yet declined below the enforcement standard limit of 5 ppb, although the water monitoring trends indicate that benzene concentrations in these wells are declining and will eventually attain the compliance level.

In light of the aforementioned conclusions concerning environmental conditions at the CVPS - Ascutney Service Center site, we strongly feel that the site is on its way to being eligible for site closure by the VTDEC. In order to achieve site closure, it may be necessary to further monitor some of the wells at the site. Another option CVPS may want to consider is to remove any contaminated soils exposed during their upcoming sewer project. This could eliminate the final potential source of future groundwater contamination. Although the evidence suggests that this soil contamination is not likely to become mobilized, removing it would clear any doubts that hydrocarbon contamination will decline below state standards, and the groundwater contamination may be reduced at a quicker rate.

Given the preponderance of data supporting the steady improvement in soil and groundwater quality conditions at the site, and elimination of all fuel storage facilities from the site, we feel that further monitoring of the site should include only MW-7, MW-10 and MW-12. Further, we consider the presence of the other monitoring wells and interception trench system to be a liability rather than a benefit to environmental conditions at the site. During the recent groundwater sampling and vapor pump testing program, we observed that a number of the monitoring well installations were loose and appeared to lack any grout or bentonite seal to isolate the well screen from the surface environment. With the removal of all USTs, the potential for surface releases mobilized by parking lot storm water runoff represents the principal threat to the site. As the monitoring well and interceptor trench array lies on a relatively steep

slope directly down-gradient of the service center driveway and parking area (with Route 131 above), overland flow of storm waters traversing these areas passes through the monitoring array. Therefore, we recommend the permanent closure (well removal and bentonite sealing/grouting of the well bore) of all non-essential monitoring wells and piezometers at the site.

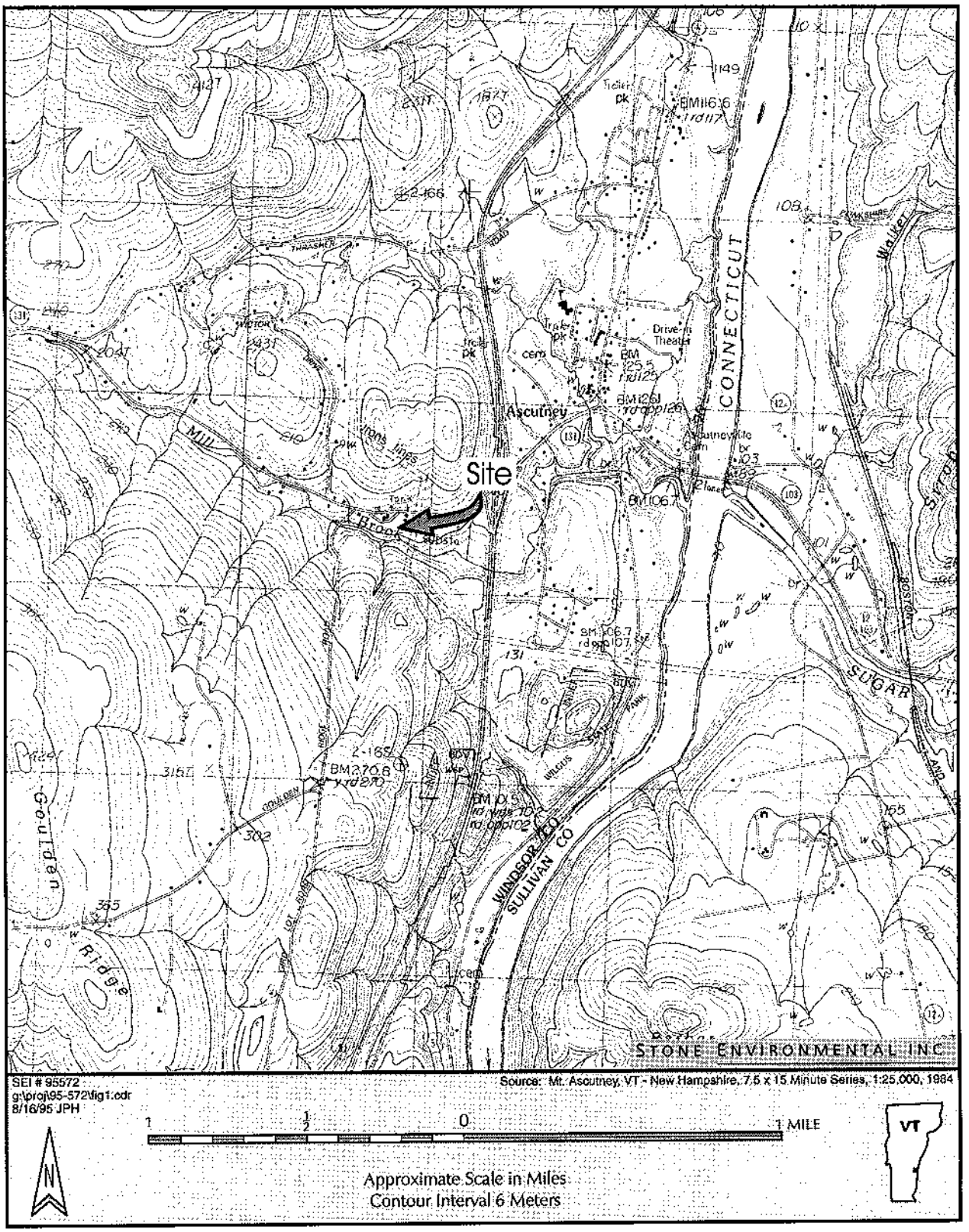


FIGURE 1
Site Location Map
CVPS - Ascutney Service Center

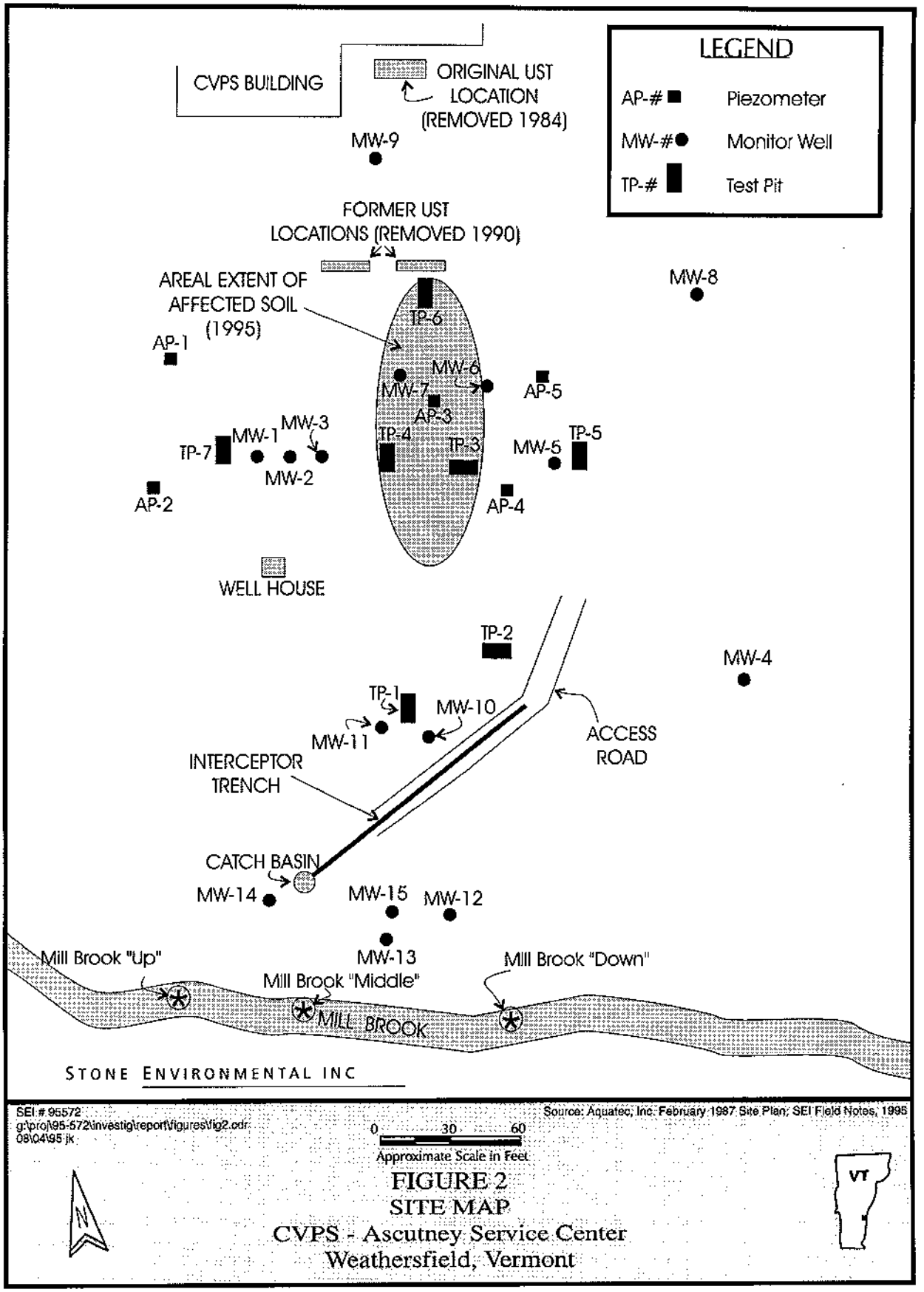


FIGURE 2
SITE MAP
CVPS - Ascutney Service Center
Weathersfield, Vermont

TABLE 1
GROUNDWATER QUALITY SUMMARY TABLE
Central Vermont Public Service Ascutney Service Station Site
Weathersfield, Vermont
June 13, 1995 Sampling Results via EPA Method 8020

PARAMETER Sample Location / Parameter Concentration (ug/l)

	SPRING HOUSE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-10	MW-11	MW-12	MW-13	MW-14	CATCH BASIN
Benzene	<1	<1	<1	<1	<1	<1	<1	170	2.1	300	<1	26	<1	<1	<1
Toluene	<1	<1	<1	<1	<1	<1	<1	77	<1	180	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<10	<1	460	<1	<1	<1	<1	<1
Xylenes	<2	<2	<2	<2	<2	<2	<2	<20	<2	635	<2	<2	<2	<2	<2
MTBE	<1	<1	<1	<1	<1	<1	<1	<10	<1	<10	<1	64	<1	<1	<1
total BTEX	<2	<2	<2	<2	<2	<2	<2	247	2.1	1575	<2	26	<2	<2	<2

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TABLE 2
SURFACE WATER QUALITY SUMMARY TABLE
Central Vermont Public Service Ascutney Service Station Site
Weathersfield, Vermont
June 13, 1995 Sampling Results via EPA Method 8020

PARAMETER	Sample Location / Parameter Concentration (ug/l)		
	MILL BROOK DOWN	MILL BROOK MIDDLE	MILL BROOK UP
Benzene	<1	<1	<1
Toluene	<1	<1	<1
Ethylbenzene	<1	<1	<1
Xylenes	<2	<2	<2
MTBE	<1	<1	<1
total BTEX	<2	<2	<2

g:\proj\..tables.wb1:swqual

TABLE3
MONITORING WELL PID SCREENING RESULTS
CVPS Ascutney Service Station Site
Weathersfield, Vermont
June 13, 1995 PID Screening (10.2 eV lamp)

STATION	PID Readings (ppm)	
	Pre-sampling	Post-sampling
MW-1	0	0
MW-2	0	0
MW-3	0	0
MW-4	0	0
MW-5	0	0
MW-6	0	0
MW-7	2.1	0
MW-8	0	0
MW-10	4	20
MW-11	0.6	0
MW-12	0	0
MW-13	0	0
MW-14	0	0
MW-15	0	0
AP-1	0	ns
AP-2	ns	ns
AP-3	35	ns
AP-4	0	ns
AP-5	0	ns

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TABLE 4

GROUNDWATER QUALITY TRENDS - BENZENE
Central Vermont Public Service Ascutney Service Station Site
Weathersfield, Vermont

STATION	Sampling Date / Benzene Concentration (ug/l)									
	03/30/87	04/27/88	04/10/89	05/01/90	04/16/91	04/30/92	04/28/93	04/30/94	04/27/95	06/13/95
MW-1	ns	<1	<1	ns	ns	ns	<1	ns	ns	<1
MW-2	ns	<1	<1	ns	ns	ns	<1	ns	ns	<1
MW-3	ns	ns	ns	ns	ns	ns	ns	ns	ns	<1
MW-4	ns	<1	<1	ns	ns	ns	ns	ns	ns	<1
MW-5	ns	220	<1	11	<1	ns	ns	ns	ns	<1
MW-6	ns	450	<1	ns	ns	ns	ns	ns	ns	<1
MW-7	ns	ns	ns	ns	ns	ns	ns	47	<1	170
MW-8	ns	<1	<1	ns	ns	ns	ns	ns	ns	2.1
MW-10	9600	5600	1000	2500	2500	1180	290	300	490	300
MW-11	ns	1000	270	<1	ns	ns	ns	140	<1	2
MW-12	1100	9.1	16	<1	<1	17	<1	<1	2.5	26
MW-13	1400	5.1	<1	ns	ns	ns	ns	ns	ns	<1
MW-14	1	<1	<1	<1	<1	ns	ns	ns	ns	<1
CATCH BASIN	2300	350	47	<1	ns	<1	ns	ns	ns	<1

GROUNDWATER QUALITY TRENDS - BTEX

STATION	SAMPLING DATE / BTEX (ug/l)						
	12/23/86	04/11/89	04/16/91	04/28/93	04/30/94	04/27/95	06/13/95
MW-1	<2	<4	ns	ns	ns	ns	<2
MW-2	180	<4	<4	ns	ns	ns	<2
MW-3	1600	ns	ns	ns	ns	ns	<2
MW-4	<2	ns	ns	ns	ns	ns	<2
MW-5	5100	<4	<4	ns	ns	ns	<2
MW-6	1600	<4	ns	ns	ns	ns	<2
MW-7	80000	ns	ns	ns	134	<2	247
MW-8	<2	<4	ns	ns	ns	ns	2.1
MW-10	45000	5610	11990	2860	2270	3070	1575
MW-11	6200	1807	ns	ns	820	<2	<2
MW-12	1400	17.7	<4	<2	<2	2.5	26
MW-13	2700	<4	ns	ns	ns	ns	<2
MW-14	<2	<4	<4	ns	ns	ns	<2
Catch Basin	6400	91.9	ns	ns	ns	ns	<2

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TABLE 5
SOIL TESTING RESULTS SUMMARY TABLE
CVPS Ascutney Service Station Site
Weathersfield, Vermont

June 13, 1995 Sampling Results via EPA Method 8260

PARAMETER	Sample Location / Parameter Concentration (ug/Kg)			
	TP-1	TP-3	TP-4	TP-6
Benzene	<25	<230	<241	<10
Toluene	<25	320	670	<10
Ethylbenzene	<25	<230	540	<10
Xylenes	<50	1000	2310	66
MTBE	<25	<230	<241	45
total BTEX	<50	1320	3520	111
PID (ppm)	25	650	400	600

TP-2 was not sampled

June 14, 1995 Sampling Results via EPA Method 418.1

STATION	TPH Concentration (mg/kg)	PID Reading (ppm)
TP-1	13.24	25
TP-3	355.02	650
TP-4	165.41	400
TP-5	1.95	0
TP-6	442.17	600
TP-7	2.83	0

TP-2 was not sampled

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TABLE 6
MONITORING WELL VAPOR EXTRACTION TEST PID SCREENING RESULTS
CVPS Ascutney Service Station Site
Weathersfield, Vermont
June 13-14, 1995 PID Screening (10.2 eV lamp)

STATION MW-1

PARAMETER	Base (zero flow)	Low-flow (3" vac)	Med-flow (8" vac)	High-flow (15" vac)
PID (ppm)	1.4	1.4	1.4	1.6
Temperature (F)	64	62	60	57
Suction Pressure (inches of water)	0	3	8	15
Pressure differential (in. of water)	0	0.1	0.27	0.85
Barometric Pressure (inches of Hg)	29.88	29.88	29.88	29.88
Air Density	0.076	0.076	0.076	0.077
Air extraction rate (cfm)	0.00	26.43	43.35	76.69

Air Density = 1.325(barometric pressure/temperature)

Air Extraction Rate = 1096.2 x sqrt(pressure differential/air density) x area of pipe cross-section

Background PID = 1.4 ppm

STATION MW-3

PARAMETER	Base (zero flow)	Low-flow (3" vac)	Med-flow (8" vac)	High-flow (15" vac)
PID (ppm)	3.5	3	2.2	3
Temperature (F)	65	59	59	58
Suction Pressure (inches of water)	0	3	8	15
Pressure differential (in. of water)	0	0.13	0.28	0.95
Barometric Pressure (inches of Hg)	29.88	29.88	29.88	29.88
Air Density	0.075	0.076	0.076	0.076
Air extraction rate (cfm)	0.00	30.05	44.10	81.16

Air Density = 1.325(barometric pressure/temperature)

Air Extraction Rate = 1096.2 x sqrt(pressure differential/air density) x area of pipe cross-section

Background PID = 2.6 ppm

STATION MW-5

PARAMETER	Base (zero flow)	Low-flow (3" vac)	Med-flow (8" vac)	High-flow (15" vac)
PID (ppm)	5.5	3.5	3.5	3.5
Temperature (F)	63	61	60	59
Suction Pressure (inches of water)	0	3	8	15
Pressure differential (in. of water)	0	0.3	0.3	0.5
Barometric Pressure (inches of Hg)	29.88	29.88	29.88	29.88
Air Density	0.076	0.076	0.076	0.076
Air extraction rate (cfm)	0.00	45.74	45.70	58.94

Air Density = 1.325(barometric pressure/temperature)

Air Extraction Rate = 1096.2 x sqrt(pressure differential/air density) x area of pipe cross-section

Background PID = 3.5 ppm

TABLE 6 (con't)

STATION MW-6

PARAMETER	Base (zero flow)	Low-flow (3" vac)	Med-flow (8" vac)	High-flow (15" vac)
PID (ppm)	1.5	1.5	1.5	1.5
Temperature (F)	65	61	61	60
Suction Pressure (inches of water)	0	3	8	15
Pressure differential (in. of water)	0	0.07	0.21	0.4
Barometric Pressure (inches of Hg)	29.88	29.88	29.88	29.88
Air Density	0.075	0.076	0.076	0.076
Air extraction rate (cfm)	0.00	22.09	38.27	52.76

Air Density = 1.325(barometric pressure/temperature)

Air Extraction Rate = 1096.2 x sqrt(pressure differential/air density) x area of pipe cross-section

Background PID = 1.5 ppm

STATION MW-7

PARAMETER	Base (zero flow)	Low-flow (3" vac)	Med-flow (8" vac)	High-flow (15" vac)
PID (ppm)	0	0	1.4	ns
Temperature (F)	75	74	74	ns
Suction Pressure (inches of water)	0	3	8	ns
Pressure differential (in. of water)	0	0.37	2	ns
Barometric Pressure (inches of Hg)	29.88	29.88	29.88	29.88
Air Density	0.074	0.074	0.074	ns
Air extraction rate (cfm)	0.00	51.43	119.56	ns

Air Density = 1.325(barometric pressure/temperature)

Air Extraction Rate = 1096.2 x sqrt(pressure differential/air density) x area of pipe cross-section

Background PID = 0 ppm

STATION MW-10

PARAMETER	Base (zero flow)	Low-flow (3" vac)	Med-flow (8" vac)	High-flow (15" vac)
PID (ppm)	1.8	1.5	1.5	2.5
Temperature (F)	63	60	60	59
Suction Pressure (inches of water)	0	3	8	15
Pressure differential (in. of water)	0	0.35	1	1.95
Barometric Pressure (inches of Hg)	29.88	29.88	29.88	29.88
Air Density	0.076	0.076	0.076	0.076
Air extraction rate (cfm)	0.00	49.36	83.43	116.39

Air Density = 1.325(barometric pressure/temperature)

Air Extraction Rate = 1096.2 x sqrt(pressure differential/air density) x area of pipe cross-section

Background PID = 1.5 ppm

STATION MW-11

PARAMETER	Base (zero flow)	Low-flow (3" vac)	Med-flow (8" vac)	High-flow (15" vac)
PID (ppm)	1.5	1.5	1.5	1.5
Temperature (F)	63	60	61	60
Suction Pressure (inches of water)	0	3	8	15
Pressure differential (in. of water)	0	0.2	0.75	0.5
Barometric Pressure (inches of Hg)	29.88	29.88	29.88	29.88
Air Density	0.076	0.076	0.076	0.076
Air extraction rate (cfm)	0.00	37.31	72.32	58.99

Air Density = 1.325(barometric pressure/temperature)

Air Extraction Rate = 1096.2 x sqrt(pressure differential/air density) x area of pipe cross-section

Background PID = 1.5 ppm

APPENDIX 1

LABORATORY RESULTS

MICROASSAYS OF VERMONT INCORPORATED

LABORATORY ANALYSIS

CLIENT NAME:	Stone Environmental Inc.	REF #:	11327
ADDRESS:	58 East State Street Montpelier, VT 05602	PROJECT NO.:	94-572
SAMPLE LOCATION:	CVPS	DATE OF SAMPLE:	6/13/95
SAMPLER:	not given	DATE OF RECEIPT:	6/14/95
		DATE OF ANALYSIS:	6/21, 6/22, 6/23, 6/27/95
ATTENTION:	Jeff Kelley	DATE OF REPORT:	7/6/95

Pertaining to the analyses of specimens submitted under the accompanying chain of custody form, please note the following:

- Water samples submitted for VOC analysis were preserved with HCl.
- Specimens were processed and examined according to the procedures outlined in the specified method.
- Holding times were honored.
- Instruments were appropriately tuned and calibrations were checked with the frequencies required in the specified method.
- Blank contamination was not observed at levels interfering with the analytical results.
- Continuing calibration standards were monitored at intervals indicated in the specified method. The resulting analytical precision and accuracy were determined to be within method QA/QC acceptance limits.
- The efficiency of analyte recovery for individual samples was monitored by the addition of surrogate analytes to all samples, standards, and blanks. Surrogate recoveries were found to be within laboratory QA/QC acceptance limits, unless noted otherwise.

Reviewed by:

Denise E. Beaudoin

Chemical Services

LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	Catch Basin
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 128%

ND = Not Detected.

MicroAssays of Vermont, Inc. P.O. Box 189 Middlesex, Vermont 05602 (802) 223-1468 FAX 223-8688

LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	Mill Brook Down
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 23, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 130%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	Mill Brook Middle
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 120%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	Mill Brook Up
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 23, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 127%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-1
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 21, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 103%

ND = Not Detected.

LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-2
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 109%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS-Ascutney	MAV REF.#:	11,340
REPORT DATE:	July 10, 1995	STATION:	MW-3 (CVPS)
DATE SAMPLED:	June 14, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 15, 1995	SAMPLER:	Jeff Kelley/Mike Sparks
ANALYSIS DATE:	June 27, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 137%

ND = Not Detected

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-4
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 122%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-5
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 112%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-6
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 114%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-7
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	10	170
Toluene	10	77
Ethylbenzene	10	ND
m+p-Xylene	20	ND
o-Xylene	10	ND
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
MTBE	10	ND

Surrogate % Recovery: 109%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-8
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 27, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	2.1
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 138%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-10
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	10	300
Toluene	10	180
Ethylbenzene	10	460
m+p-Xylene	20	590
o-Xylene	10	45
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
MTBE	10	ND

Surrogate % Recovery: 101%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-11
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 21, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 111%

ND = Not Detected.

LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-12
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	26
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	64

Surrogate % Recovery: 106%

ND = Not Detected.

LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-13
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 21, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 108%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	MW-14
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 113%

ND = Not Detected.

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LABORATORY REPORT

EPA METHOD 8020 ANALYTES + MTBE with GC/MS Confirmation

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS	MAV REF.#:	11,327
REPORT DATE:	July 6, 1995	STATION:	Spring House
DATE SAMPLED:	June 13, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 14, 1995	SAMPLER:	not given
ANALYSIS DATE:	June 22, 1995	SAMPLE TYPE:	Water

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
m+p-Xylene	2	ND
o-Xylene	1	ND
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
MTBE	1	ND

Surrogate % Recovery: 127%

ND = Not Detected.

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LABORATORY ANALYSIS

CLIENT NAME:	Stone Environmental Inc.	REF #:	11340
ADDRESS:	58 East State Street	PROJECT NO.:	94-572
	Montpelier, VT 05602		
SAMPLE LOCATION:	CVSP-Ascutney	DATE OF SAMPLE:	6/14/95
SAMPLER:	Jeff Kelly/Mike Sparks	DATE OF RECEIPT:	6/14/95
		DATE OF ANALYSIS:	6/27/95
ATTENTION:	Jeff Kelley	DATE OF REPORT:	7/10/95

Pertaining to the analyses of specimens submitted under the accompanying chain of custody form, please note the following:

- Water samples submitted for VOC analysis were preserved with HCl. Soil samples were not preserved. They were kept under refrigeration until time of analysis.
- Specimens were processed and examined according to the procedures outlined in the specified method.
- Holding times were honored.
- Instruments were appropriately tuned and calibrations were checked with the frequencies required in the specified method.
- Blank contamination was not observed at levels interfering with the analytical results.
- Continuing calibration standards were monitored at intervals indicated in the specified method. The resulting analytical precision and accuracy were determined to be within method QA/QC acceptance limits.
- The efficiency of analyte recovery for individual samples was monitored by the addition of surrogate analytes to all samples, standards, and blanks. Surrogate recoveries were found to be within laboratory QA/QC acceptance limits, unless noted otherwise.

Reviewed by:

Denise E. Beauchard

Director, Chemical Services

MicroAssays of Vermont, Inc. P.O. Box 189 Middlesex, Vermont 05602 (802) 223-1468 FAX 223-8688

LABORATORY REPORT

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS-Ascutney	REF.#:	11,340
REPORT DATE:	July 10, 1995	STATION:	TP-1
DATE SAMPLED:	June 14, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 15, 1995	SAMPLER:	Jeff Kelley/Mike Sparks
ANALYSIS DATE:	June 27, 1995	SAMPLE TYPE:	Soil - 81% dry wt

EPA METHOD 8020 ANALYTES + MTBE by METHOD 8260 (GC/MS Confirmation)

PARAMETER	PQL (µg/Kg dry wt.)	Conc. (µg/Kg dry wt.)\
Benzene	25	ND
Toluene	25	ND
Ethylbenzene	25	ND
m+p-Xylene	50	ND
o-Xylene	25	ND
Chlorobenzene	25	ND
1,2-Dichlorobenzene	25	ND
1,3-Dichlorobenzene	25	ND
1,4-Dichlorobenzene	25	ND
MTBE	25	ND

Surrogate % Recovery: 95%

ND= Not Detected.

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LABORATORY REPORT

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS-Ascutney	REF.#:	11,340
REPORT DATE:	July 10, 1995	STATION:	TP-3
DATE SAMPLED:	June 14, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 15, 1995	SAMPLER:	Jeff Kelley/Mike Sparks
ANALYSIS DATE:	June 27, 1995	SAMPLE TYPE:	Soil - 87% dry wt

EPA METHOD 8020 ANALYTES + MTBE by METHOD 8260 (GC/MS Confirmation)

PARAMETER	PQL (µg/Kg dry wt.)	Conc. (µg/Kg dry wt.)\
Benzene	230	ND
Toluene	230	320
Ethylbenzene	230	ND
m+p-Xylene	460	1,000
o-Xylene	230	ND
Chlorobenzene	230	ND
1,2-Dichlorobenzene	230	ND
1,3-Dichlorobenzene	230	ND
1,4-Dichlorobenzene	230	ND
MTBE	230	ND

Surrogate % Recovery: 102%

ND= Not Detected.

LABORATORY REPORT

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS-Ascutney	REF.#:	11,340
REPORT DATE:	July 10, 1995	STATION:	TP-4
DATE SAMPLED:	June 14, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 15, 1995	SAMPLER:	Jeff Kelley/Mike Sparks
ANALYSIS DATE:	June 27, 1995	SAMPLE TYPE:	Soil - 83% dry wt

EPA METHOD 8020 ANALYTES + MTBE by METHOD 8260 (GC/MS Confirmation)

PARAMETER	PQL (µg/Kg dry wt.)	Conc. (µg/Kg dry wt.)\
Benzene	241	ND
Toluene	241	670
Ethylbenzene	241	540
m+p-Xylene	482	1,700
o-Xylene	241	610
Chlorobenzene	241	ND
1,2-Dichlorobenzene	241	ND
1,3-Dichlorobenzene	241	ND
1,4-Dichlorobenzene	241	ND
MTBE	241	ND

Surrogate % Recovery: 107%

ND= Not Detected.

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LABORATORY REPORT

CLIENT NAME:	Stone Environmental Inc.	PROJECT CODE:	94-572
PROJECT NAME:	CVPS-Ascutney	REF.#:	11,340
REPORT DATE:	July 10, 1995	STATION:	TP-6
DATE SAMPLED:	June 14, 1995	TIME SAMPLED:	not given
DATE RECEIVED:	June 15, 1995	SAMPLER:	Jeff Kelley/Mike Sparks
ANALYSIS DATE:	June 27, 1995	SAMPLE TYPE:	Soil - 87% dry wt

EPA METHOD 8020 ANALYTES + MTBE by METHOD 8260 (GC/MS Confirmation)

PARAMETER	PQL (µg/Kg dry wt.)	Conc. (µg/Kg dry wt.)\
Benzene	10	ND
Toluene	10	ND
Ethylbenzene	10	ND
m+p-Xylene	20	45
o-Xylene	10	21
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
MTBE	10	45

Surrogate % Recovery: 110%

ND= Not Detected.

*Note: This sample was analyzed at a 1:100 dilution within EPA hold time. It was re-analyzed at a 1:10 dilution after hold time.

LABORATORY ANALYSIS

CLIENT NAME:	Stone Environmental Inc.	REF #:	11340
ADDRESS:	58 East State Street Montpeleir, VT 05602	PROJECT NO.:	94-572
SAMPLE LOCATION:	CVPS-Ascutney	DATE OF SAMPLE:	6/14/95
SAMPLER:	Jeff Kelley/Mike Sparks	DATE OF RECEIPT:	6/15/95
		DATE OF ANALYSIS:	6/29/95
ATTENTION:	Jeff Kelley	DATE OF REPORT:	7/10/95

TOTAL PETROLEUM HYDROCARBONS
EPA Method 418.1

Sample	MDL	TPH in mg/kg
TP-7	1.0 mg/kg	2.83
TP-6	1.0 mg/kg	442.17
TP-5	1.0 mg/kg	1.95
TP-4	1.0 mg/kg	165.41
TP-3	1.0 mg/kg	355.02
TP-1	1.0 mg/kg	13.24

BPQL = Below Practical Quantitation Limit

Reviewed by:

Denise. E Bouchard

Director, Chemical Services

CHAIN OF CUSTODY RECORD

STONE ENVIRONMENTAL INC
58 East State Street Phone / 802.229 4541
Montpelier, Vermont 05602 Fax / 802.229.5417

SEI Study # 94-572 (CVPS) Project Name/Client Study #

Study Director Jeff Kelley Sampling Personnel (name/signature)

11327

SAMPLE INFORMATION

Sample Identification	Date Collected	Type *	Cont.**	Number of Containers	Analysis Requested
- MW-1 OK (All preserved with HCl)	6/13/95	WTR	40 ml	2	
- MW-7 OK					
- MW-13 OK					
- MW-10 OK					
- MW-11 OK					
- MW-14 OK					
- MW-12 OK					
- MW-2 OK					
- MW-5 OK					
- MW-6 OK					

Ship To:

Relinquished By: (Signature) Darin Rego	Date/Time 6/14/95 8:12A	Received By: (Signature) Sara Holst	Date/Time 6/14/95 8:43a
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Date/Time
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Date/Time

Special Instructions: * Type of Sample (1) water (2) soil
** Container (1) bag (2) bottle (3) shelby tube (4) other:

Condition of samples when received by lab:

☐ ambient air ☐ ice/ice substitute ☐ frozen

Please remit a completed, signed copy to:

Stone Environmental, Inc.
58 East State Street
Montpelier, Vermont 05602

g:\projfrms\chain4.cdr

CHAIN OF CUSTODY RECORD

STONE ENVIRONMENTAL INC
58 East State Street Phone / 802 229 4541
Montpelier, Vermont 05602 Fax / 802 229 5417

SEI Study # 94-572 (CVPS)

Project Name/Client Study #

Study Director JEFF KELLEY

Sampling Personnel (name/signature)

11327

SAMPLE INFORMATION

Sample Identification	Date Collected	Type *	Cont.**	Number of Containers	Analysis Requested				
MW-4 OF (all preserved w/HCl)	6/13/95	WTR	40ml	2					
SPRING HOUSE OF									
CATCH BASIN OF									
MILL BROOK MIDDLE ST									
MILL BROOK - UP OF									
MILL BROOK - DOWN OF									
MW-8 OF									

Ship To:

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Date/Time
Darren Rapp	6/14/95 8:42A	Sara Hulet	6/14/95 8:47
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Date/Time
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Date/Time

Special Instructions: * Type of Sample (1) water (2) soil
** Container (1) bag (2) bottle (3) shelby tube (4) other:_____

Condition of samples when received by lab:

☐ ambient air ☐ ice/ice substitute ☐ frozen

Please remit a completed, signed copy to:

Stone Environmental, Inc.
58 East State Street
Montpelier, Vermont 05602

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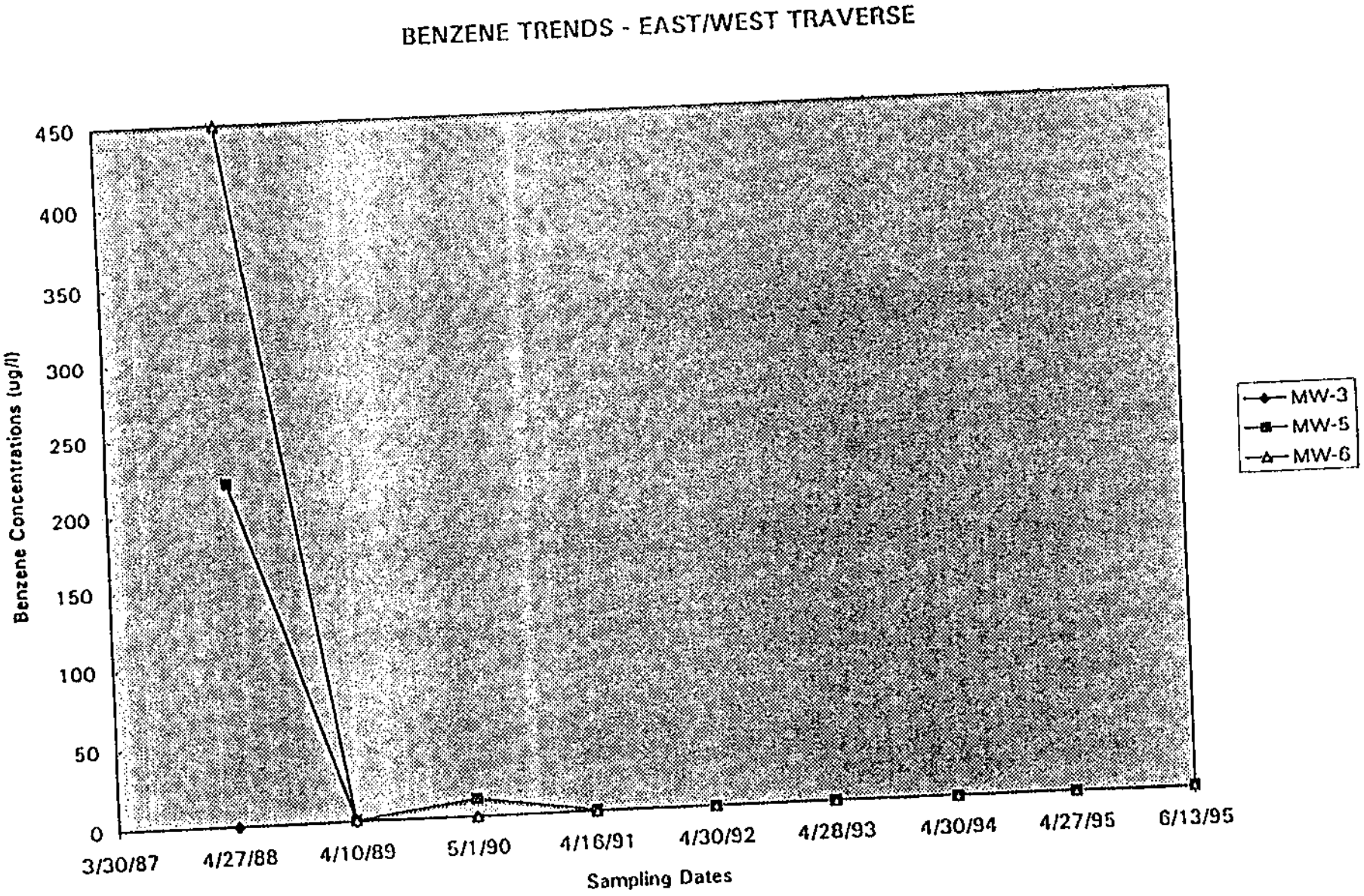
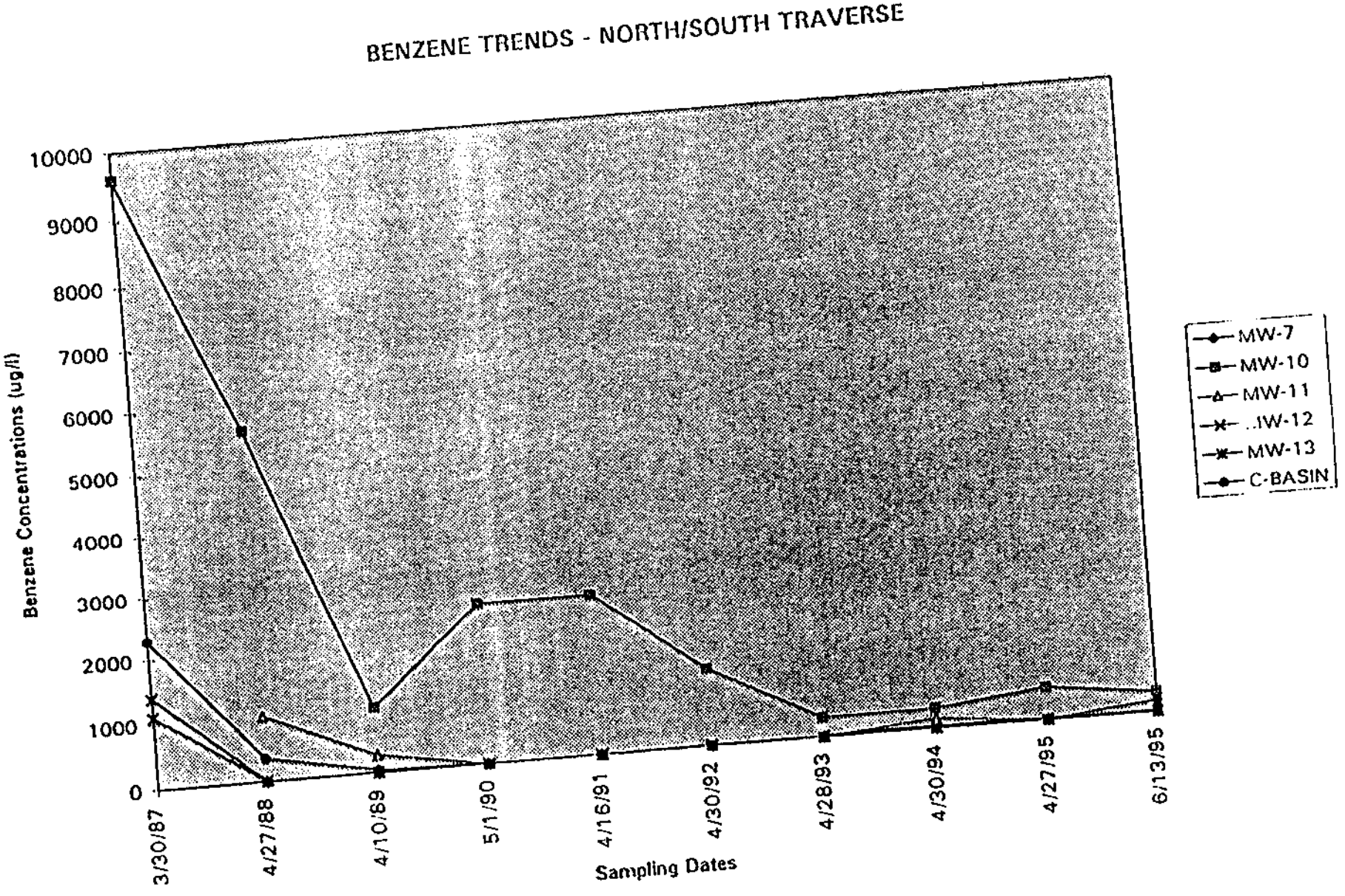
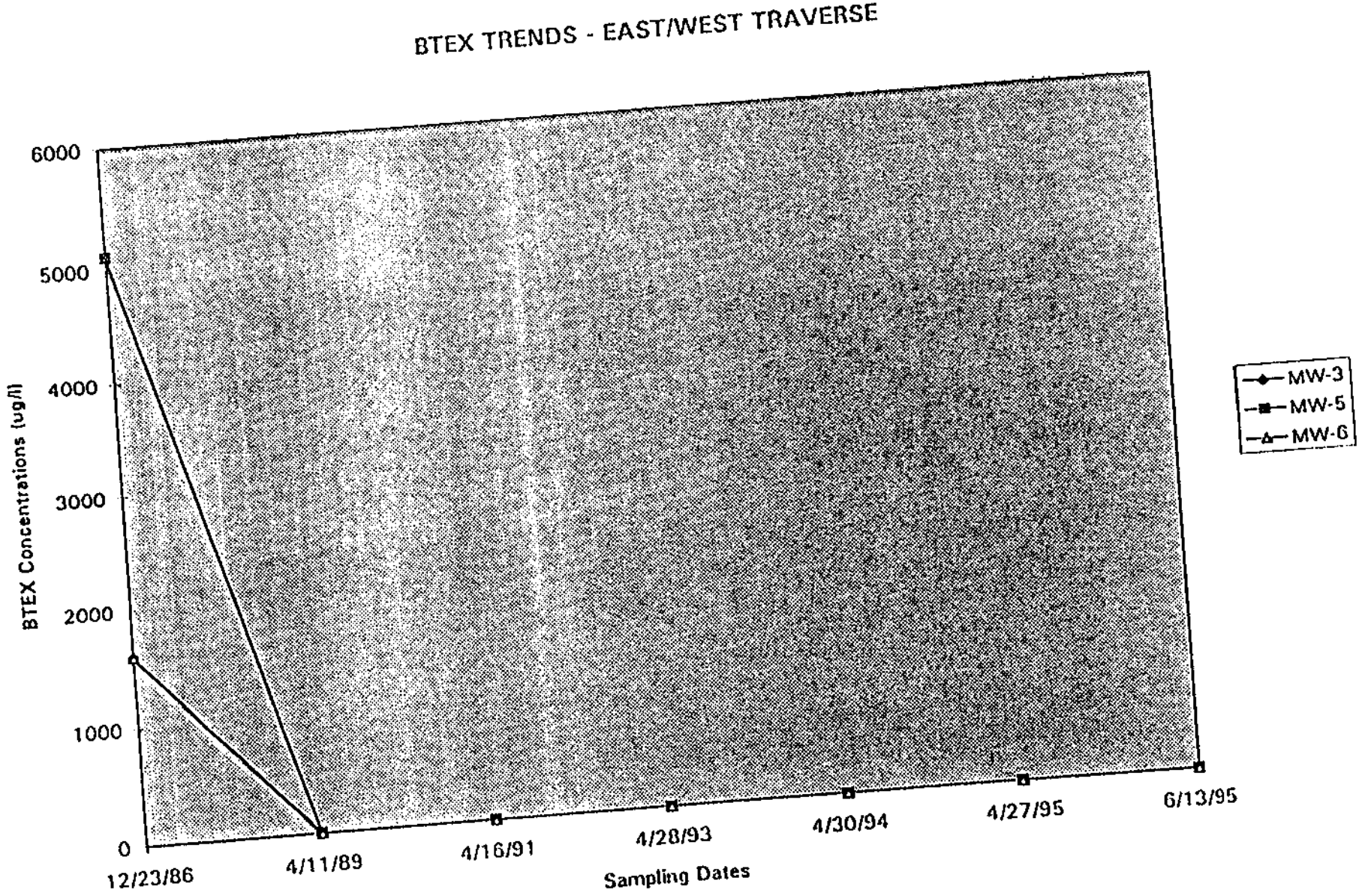
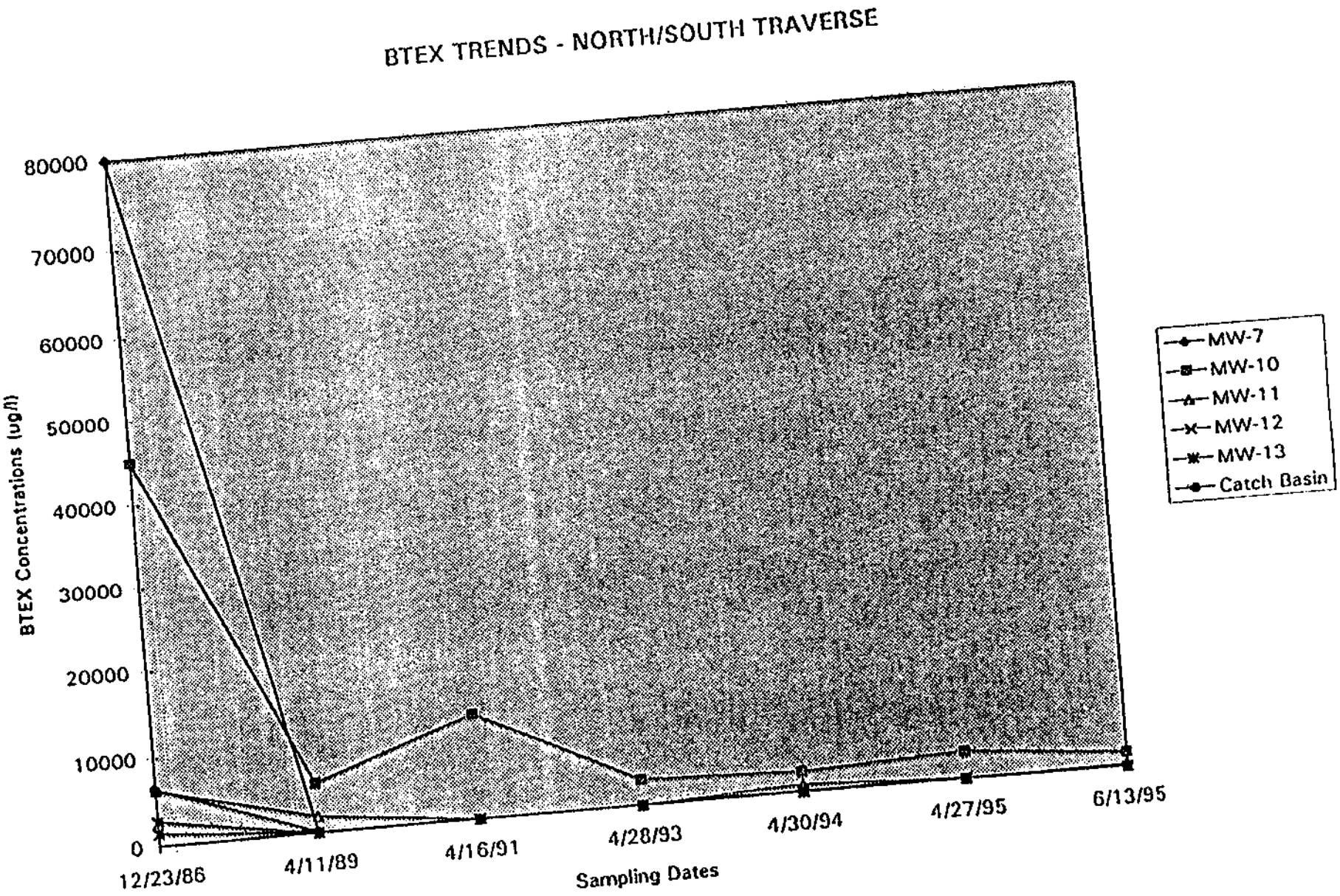
APPENDIX 2

CONTAMINANT TRENDS


BENZENE TRENDS - EAST/WEST TRAVERSE
Benzene Concentrations (ug/l)
450
400
350
300
250
200
150
100
50
0
3/30/87
4/27/88
4/10/89
5/1/90
4/16/91
4/30/92
4/28/93
4/30/94
4/27/95
6/13/95
Sampling Dates
MW-3
MW-5
MW-6


BENZENE TRENDS - NORTH/SOUTH TRAVERSE
Benzene Concentrations (ug/l)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
3/30/87
4/27/88
4/10/89
5/1/90
4/16/91
4/30/92
4/28/93
4/30/94
4/27/95
6/13/95
Sampling Dates
MW-7
MW-10
MW-11
..IW-12
MW-13
C-BASIN


BTEX TRENDS - EAST/WEST TRAVERSE
6000
5000
4000
3000
2000
1000
0
BTEX Concentrations (ug/l)
12/23/86
4/11/89
4/16/91
4/28/93
4/30/94
4/27/95
6/13/95
Sampling Dates
MW-3
MW-5
MW-6


BTEX TRENDS - NORTH/SOUTH TRAVERSE
BTEX Concentrations (ug/l)
80000
70000
60000
50000
40000
30000
20000
10000
0
12/23/86
4/11/89
4/16/91
4/28/93
4/30/94
4/27/95
6/13/95
Sampling Dates
MW-7
MW-10
MW-11
MW-12
MW-13
Catch Basin